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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,336

09/25/2007

Konrad Kemper

2400.0740000/VLC/DAS

2752

26111 7590 11/10/2009  
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.  
1100 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

BROWN, COURTNEY A

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

11/10/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,336	<b>Applicant(s)</b> KEMPER ET AL.	
	<b>Examiner</b> COURTNEY BROWN	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3,9 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,9 and 11-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/31/09</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 31, 2009 has been entered.

#### ***Acknowledgement of Receipt/Status of Claims***

This Office Action is in response to the amendment filed January 14, 2009, June 22, 2009 and August 31, 2009. Claims 3, 9 and 11-17 are pending in the application. Claims 1, 2, 4-8 and 10 have been cancelled. Claims 11-17 are newly added. Claims 3, 9 and 11-17 are being examined for patentability.

Applicant's arguments, see pages 16-25, filed June 22, 2009, with respect to the rejection(s) of claim(s) 3, 9, and 11-17 under 35 USC 103 (a) have been fully considered and are not persuasive. However, upon further consideration, a new ground(s) of rejection has been made in this Office Action.

Rejections not reiterated from the previous Office Action are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They

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constitute the complete set of rejections and/or objections presently being applied to the instant application.

### ***Information Disclosure Statement***

The Information Disclosure Statements (IDS) submitted on August 31, 2009 has been considered by the examiner.

### ***Withdrawn Rejections***

The rejection of claims 3, 9, and 11-17 are rejected under 35 U.S.C. 103(a) over Suarez-Cervieri et al. (US Patent Application 20050032903) in view of Oliveira (Proceedings VII World Soybean Research Conference, CABI abstracts) and Henn (Mississippi State University) has been **withdrawn**.

### ***Claim Objection(s)***

Claim 9 is objected to because of the following informalities: Although "DMI" is defined in the instant specification as "demethylation inhibitor", it would be more clear if DMI is written out in the instant claim since it is an independent claim. Appropriate correction is required.

**New Rejection(s)**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 recites the limitation "the DMI fungicide fluquinconazol" in line 2. There is insufficient antecedent basis for this limitation in the claim for "the".

***Claim Rejections- 35 USC § 102/103 Alternative***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 3, 9 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Asrar et al. (US Patent 7,098,170 B2).**

Asrar et al. disclose a method of increasing the vigor and/or the yield of an agronomic plant that is a member of the class Magnolisopida, specifically a soybean plant (claims 1, 18 and 23 of Asrar et al.). Said method comprises treating the plant or its propagation material with an effective amount of **fluquinconazole** and/or **azoxystrobin** (claims 1, 3 and 10 of Asrar et al.). The plant or its propagation material comprises seed that is treated with an amount of fungicide in an amount from about 0.1 gm/100 kg of seed to about 1,000 gm/100 kg of seed (claims 1 and 12 of Asrar et al.). Thus, the seeds of Asrar et al. are inherently protected against soya bean rust.

Asrar et al. disclose all the limitations of the instant claims wherein soybean and seed are treated with fluquinconazole alone and/or in combined with azoxystrobin which inherently protects the soybean from soybean rust.

If one argues that the claimed method is not taught, it would be obvious to one of ordinary skill in the art to assume that a method of increasing the vigor and/or the yield of a soybean plant comprising treating the plant or its propagation material with an effective amount of fluquinconazole and/or azoxystrobin would protect said soybean from rust. The burden of proof has been shifted to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP §§ 2112- 2112.02.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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**Claims 3, 9 and 11-17 are rejected under 35 U.S.C. 103(a) as obvious being over Asrar et al. (US Patent 7,098,170 B2) in view of Ammermann et al. (US Patent Application 2005/0165076 A1) and Suarez-Cervieri et al. (US Patent Application 20050032903).**

***Applicant's Invention***

Applicant claims a method of protecting soya beans against soya bean rust comprising applying one or more demethylation inhibitor (DMI) fungicide, fluquinconazole, and a mixture of fluquinconazole with an active selected from prothiconazole and tolyfluanid to the seed of said plants.

***Determination of the scope and the content of the prior art  
(MPEP 2141.01)***

Asrar et al. teach a method of increasing the vigor and/or the yield of an agronomic plant that is a member of the class Magnolisopida, specifically a soybean plant (claims 1, 18 and 23 of Asrar et al.). Said method comprises treating the plant or its propagation material with an effective amount of **fluquinconazole** and/or **azoxystrobin** (claims 1, 3 and 10 of Asrar et al.). The plant or its propagation material comprises seed and the seed is treated with an amount of the fungicide in an amount from about 0.1 gm/100 kg of seed to about 1,000 gm/100 kg of seed (claims 1 and 12 of Asrar et al.). Asrar et al. teach treating soybean and **seed** using fluquinconazole alone



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and/or in combined with azoxystrobin which would inherently protect the soybean from soybean rust.

***Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)***

The difference between the invention of the instant application and that of Asrar et al. is that Asrar et al. do not expressly teach a method for protecting soy bean plants against rust using prothioconazole. This deficiency in Asrar et al. is cured by the teachings of Ammermann et al. Ammermann et al. teach a fungicidal mixture, comprising (1) 2-[2-(1-chlorocyclopropyl)-3-(2-chlorophenyl)-2-hydroxypropyl]-2,4-dihydro-[1,2,4]-triazole-3-thione (prothioconazole) and at least one further triazole or a salt or adduct thereof, selected from the group consisting of (2) epoxiconazole, (3) metconazole, (4) propiconazole and (5) fluquinconazole (claim 1 of Ammermann et al.).

The difference between the invention of the instant application and that of Asrar et al. is that Asrar et al. do not expressly teach a method for protecting soy bean plants against rust using tolyfluanid. This deficiency in Asrar et al. is cured by the teachings of Suarez-Cervieri et al. Suarez-Cervieri et al. teach the use of prothioconazole ([0029]) and tolyfluanid ([0039]) as possible fungicides, combined with strobilurin-type fungicides that can be used to treat rust.

***Finding of prima facie obviousness***

***Rationale and Motivation (MPEP 2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Asrar et al., Ammermann et al. and Suarez-Cervieri et al. to devise a method of protecting soy beans against soy bean rust comprising applying one or more demethylation inhibitor (DMI) fungicide. Ammermann et al. teach that fungicidal mixtures comprising prothioconazole and at least one further triazole, selected from the group consisting of epoxiconazole, metconazole, propiconazole and fluquinconazole have an improved activity against harmful fungi combined with a reduced total amount of active compounds applied and are thus **synergistic mixtures** ([0052] of Ammermann et al.). Ammermann et al. teach that said mixtures are especially important for controlling a large number of fungi in a variety of crop plants, such as cotton, vegetable species (for example cucumbers, beans, tomatoes, potatoes and cucurbits), barley, grass, oats, bananas, coffee, corn, fruit species, rice, rye, **soya**, grapevine, wheat, ornamentals, sugarcane, and a variety of **seeds** ([0110]). Suarez-Cervieri et al. teach that the severe incidence of rust diseases in soybean crops is caused by the harmful fungi *Phakopsora pachyrhizi* and *Phakopsora meibomia* ([0002] of Suarez-Cervieri et al.). Suarez-Cervieri et al. also teach the treatment of **seed** ([0044] of Suarez-Cervieri et al.).

One skilled in the art at the time the invention was made would have been motivated to treat soy bean seeds or soy bean plants with fluquinconazole combined with prothiconazole and/ or tolyfluanid to protect soy bean plants against soy bean rust

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with a reasonable expectation of success since it has been shown to be a synergistic mixture with improved activity against harmful fungi.

In reference to a method for protecting transgenic soybeans using a composition comprising fluquinconazole and prothioconazole or tolylfluanid, it is the Examiner's position that it is known to one of ordinary skill in the art that a fungicide that works to protect regular soybean plants will also work to protect transgenic soybeans in manner in absence of evidence to the contrary.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

### ***Examiner's Response to Applicant's Remarks***

Applicant's arguments, filed October 31, 2009 with respect to the 103 rejection of claims 3, 9, and 11-17 are rejected under 35 U.S.C. 103(a) over Suarez-Cervieri et al. (US Patent Application 20050032903) in view of Oliveira (Proceedings VII World Soybean Research Conference, CABI abstracts) and Henn (Mississippi State University) have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The claims remain rejected.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR Only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Courtney Brown, whose telephone number is 571-270-3284. The examiner can normally be reached on Monday-Friday from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Courtney A. Brown  
Patent Examiner  
Technology Center 1600  
Group Art Unit 1616

/Ernst V Arnold/  
Primary Examiner, Art Unit 1616